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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,918	03/30/2004	Masahiro Ono	ED-US030239	3163

22919 7590 12/21/2005

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EXAMINER

BONCK, RODNEY H

ART UNIT PAPER NUMBER

3681

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/811,918

Applicant(s)

ONO ET AL.

Examiner

Rodney H. Bonck

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3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-9 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 14 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The following action is in response to the amendment received November 14, 2005.

Drawings

The replacement sheet of drawing was received on November 14, 2005. The drawings have been approved for entry.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 has been amended to recite that "the flat surface and the cylindrical portion being arranged to abut each other". By definition, the term "abut" means "to touch along a border or with a projecting part" (*Webster's New Collegiate Dictionary*), and it is unclear how this applies to the disclosed structure, since they appear to be of one-piece construction. The specification does not appear to disclose any particular purpose or problem solved by disposing the flat surface and cylindrical portion to abut one another or even mention that they abut. Thus the disclosure fails to clarify the intended meaning of this term in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Wack et al. (US 2002/0175037 A1). The Wack et al. device discloses a hydrodynamic torque transmitting device comprising an input side front cover 1, an impeller 11, a turbine 17 having a turbine hub 27, and a piston 40. The piston has a disk-shaped main body and a frictional coupling portion (adjacent friction lining 46), and an inner support portion. The turbine hub 27 and the front cover 1 include opposing portions that are mutually opposed to each other across a space in an axial direction (see the figure in Wack et al.). A gap in the axial direction is maintained between the opposing portions such that a load would not be applied to the front cover when the piston moves to a position closest to the front cover. The space as shown is clearly longer than the axial distance between the frictional coupling portion and the front cover. The support portion of the piston is an annular portion, which can be said to have a constant radial width, at least to the same extent as does the instant invention. The radial width is clearly several times the plate thickness of the piston. The piston further includes a cylindrical portion extending toward the front cover. The position of the axial end of the cylindrical portion can be said to be matching an axial end of the turbine hub insofar as the term

"matching" has been defined in the claims. Regarding claims 1-7, insofar as definite, the flat surface of the piston that contacts the turbine can be said to abut the cylindrical portion.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wack et al.(US 2002/0175037 A1) in view of Yamaguchi et al.('213). The Wack et al. device differs from this claim in that a seal is not shown between the piston and the turbine hub. Yamaguchi et al. shows a lockup clutch piston 44 supported on turbine hub 27 by

cylindrical portion 48. A seal 49 is provided on the turbine hub to seal between chambers on opposing sides of the piston. It would have been obvious to provide a seal on the turbine hub of Wack et al. between the turbine hub and the cylindrical portion of the piston, the motivation being to seal between the pressure chambers on opposite sides of the piston.

Response to Arguments

Applicant's arguments filed November 14, 2005 have been fully considered but they are not persuasive. Regarding claim 1, applicants argue that the flat surface of the piston in Wack et al. does not abut the cylindrical portion of the piston. As noted above, there does not appear to be disclosure that there are any abutting parts between the piston flat surface and the cylindrical part as they appear to be a single part. The flat portion in Wack et al. has a part extending to the cylindrical portion as in applicants' device and thus appears to be abutting in the same sense.

Regarding claim 8 applicants argue that the position of the end of the cylindrical portion in Wack et al. is not matching the end surface of the turbine hub. In the figure of Wack et al. the position of the end of the cylindrical portion appears to substantially match the turbine hub end. The term "matching" is broad and does not specify that the edges of the two elements be in exact radial alignment. The minute difference that Wack et al. appears to show is insignificant.

Regarding claim 9, applicants argue that the cylindrical portion in Yamaguchi et al. extends away from the front cover. Yamaguchi et al. is applied to show the seal, however, which is independent of the direction the cylindrical portion extends and is still believed valid as a teaching of providing a seal for the piston.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hinkel('088) is cited for its showing of seal 71 in a surface of the turbine hub and a piston cylindrical portion that extends to the same axial position as the turbine hub (Fig. 1 of Hinkel).

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

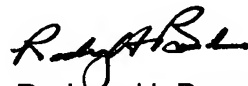
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (571)

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272-7089. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney H. Bonck
Primary Examiner
Art Unit 3681

rhb
December 19, 2005

Approved
RHB
12/19/05

Replacement Sheet

